RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: _10/539,630_

Source: _PCT_

Date Processed by STIC: _6/30/65_

ENTERED

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           RAW SEQUENCE LISTING              DATE: 06/30/2005
           PATENT APPLICATION:  US/10/539,630    TIME: 17:41:33

           Input Set : A:\pto.kd.txt
           Output Set: N:\CRF4\06302005\J539630.raw

      2 <110> APPLICANT: Takeda Chemical Industries, Ltd.
      4 <120> TITLE OF INVENTION: Preventing and treating agent for cancer
      6 <130> FILE REFERENCE: 3130WOOP
C--> 8 <140> CURRENT APPLICATION NUMBER: US/10/539,630
C--> 8 <141> CURRENT FILING DATE: 2005-06-17
      8 <150> PRIOR APPLICATION NUMBER: JP2002-373144
      9 <151> PRIOR FILING DATE: 2002-12-24
     11 <160> NUMBER OF SEQ ID NOS: 14
     13 <210> SEQ ID NO: 1
     14 <211> LENGTH: 751
     15 <212> TYPE: PRT
     16 <213> ORGANISM: Human
     18 <400> SEQUENCE: 1
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     20                   5                 10                  15
     21 Lys Arg Val Lys Ser Glu Tyr Met Arg Leu Arg Gln Leu Lys Arg Phe
     22               20                  25                  30
     23 Arg Arg Ala Asp Glu Val Lys Ser Met Phe Ser Ser Asn Arg Gln Lys
     24           35                  40                  45
     25 Ile Leu Glu Arg Thr Glu Ile Leu Asn Gln Glu Trp Lys Gln Arg Arg
     26       50                  55                  60
     27 Ile Gln Pro Val His Ile Leu Thr Ser Val Ser Ser Leu Arg Gly Thr
     28   65                  70                  75                  80
     29 Arg Glu Cys Ser Val Thr Ser Asp Leu Asp Phe Pro Thr Gln Val Ile
     30               85                  90                  95
     31 Pro Leu Lys Thr Leu Asn Ala Val Ala Ser Val Pro Ile Met Tyr Ser
     32               100                 105                 110
     33 Trp Ser Pro Leu Gln Gln Asn Phe Met Val Glu Asp Glu Thr Val Leu
     34           115                 120                 125
     35 His Asn Ile Pro Tyr Met Gly Asp Glu Val Leu Asp Gln Asp Gly Thr
     36       130                 135                 140
     37 Phe Ile Glu Glu Leu Ile Lys Asn Tyr Asp Gly Lys Val His Gly Asp
     38 145                 150                 155                 160
     39 Arg Glu Cys Gly Phe Ile Asn Asp Glu Ile Phe Val Glu Leu Val Asn
     40               165                 170                 175
     41 Ala Leu Gly Gln Tyr Asn Asp Asp Asp Asp Asp Asp Gly Asp Asp
     42               180                 185                 190
     43 Pro Glu Glu Arg Glu Glu Lys Gln Lys Asp Leu Glu Asp His Arg Asp
     44           195                 200                 205
     45 Asp Lys Glu Ser Arg Pro Pro Arg Lys Phe Pro Ser Asp Lys Ile Phe
     46       210                 215                 220
     47 Glu Ala Ile Ser Ser Met Phe Pro Asp Lys Gly Thr Ala Glu Glu Leu
     48 225                 230                 235                 240
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49 Lys Glu Lys Tyr Lys Glu Leu Thr Glu Gln Gln Leu Pro Gly Ala Leu
50              245                 250                 255
51 Pro Pro Glu Cys Thr Pro Asn Ile Asp Gly Pro Asn Ala Lys Ser Val
52              260                 265                 270
53 Gln Arg Glu Gln Ser Leu His Ser Phe His Thr Leu Phe Cys Arg Arg
54              275                 280                 285
55 Cys Phe Lys Tyr Asp Cys Phe Leu His Arg Lys Cys Asn Tyr Ser Phe
56              290                 295                 300
57 His Ala Thr Pro Asn Thr Tyr Lys Arg Lys Asn Thr Glu Thr Ala Leu
58 305                 310                 315                 320
59 Asp Asn Lys Pro Cys Gly Pro Gln Cys Tyr Gln His Leu Glu Gly Ala
60              325                 330                 335
61 Lys Glu Phe Ala Ala Ala Leu Thr Ala Glu Arg Ile Lys Thr Pro Pro
62              340                 345                 350
63 Lys Arg Pro Gly Gly Arg Arg Arg Gly Arg Leu Pro Asn Asn Ser Ser
64              355                 360                 365
65 Arg Pro Ser Thr Pro Thr Ile Asn Val Leu Glu Ser Lys Asp Thr Asp
66    370                 375                 380
67 Ser Asp Arg Glu Ala Gly Thr Glu Thr Gly Gly Glu Asn Asn Asp Lys
68 385                 390                 395                 400
69 Glu Glu Glu Glu Lys Lys Asp Glu Thr Ser Ser Ser Ser Glu Ala Asn
70              405                 410                 415
71 Ser Arg Cys Gln Thr Pro Ile Lys Met Lys Pro Asn Ile Glu Pro Pro
72              420                 425                 430
73 Glu Asn Val Glu Trp Ser Gly Ala Glu Ala Ser Met Phe Arg Val Leu
74              435                 440                 445
75 Ile Gly Thr Tyr Tyr Asp Asn Phe Cys Ala Ile Ala Arg Leu Ile Gly
76    450                 455                 460
77 Thr Lys Thr Cys Arg Gln Val Tyr Glu Phe Arg Val Lys Glu Ser Ser
78 465                 470                 475                 480
79 Ile Ile Ala Pro Ala Pro Ala Glu Asp Val Asp Thr Pro Pro Arg Lys
80              485                 490                 495
81 Lys Lys Arg Lys His Arg Leu Trp Ala Ala His Cys Arg Lys Ile Gln
82              500                 505                 510
83 Leu Lys Lys Asp Gly Ser Ser Asn His Val Tyr Asn Tyr Gln Pro Cys
84              515                 520                 525
85 Asp His Pro Arg Gln Pro Cys Asp Ser Ser Cys Pro Cys Val Ile Ala
86    530                 535                 540
87 Gln Asn Phe Cys Glu Lys Phe Cys Gln Cys Ser Ser Glu Cys Gln Asn
88 545                 550                 555                 560
89 Arg Phe Pro Gly Cys Arg Cys Lys Ala Gln Cys Asn Thr Lys Gln Cys
90              565                 570                 575
91 Pro Cys Tyr Leu Ala Val Arg Glu Cys Asp Pro Asp Leu Cys Leu Thr
92              580                 585                 590
93 Cys Gly Ala Ala Asp His Trp Asp Ser Lys Asn Val Ser Cys Lys Asn
94              595                 600                 605
95 Cys Ser Ile Gln Arg Gly Ser Lys Lys His Leu Leu Leu Ala Pro Ser
96    610                 615                 620
97 Asp Val Ala Gly Trp Gly Ile Phe Ile Lys Asp Pro Val Gln Lys Asn
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Input Set : **A:\pto.kd.txt**
Output Set: **N:\CRF4\06302005\J539630.raw**

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 98 625                630                635                640
 99 Glu Phe Ile Ser Glu Tyr Cys Gly Glu Ile Ile Ser Gln Asp Glu Ala
100                    645                650                655
101 Asp Arg Arg Gly Lys Val Tyr Asp Lys Tyr Met Cys Ser Phe Leu Phe
102                660                665                670
103 Asn Leu Asn Asn Asp Phe Val Val Asp Ala Thr Arg Lys Gly Asn Lys
104            675                680                685
105 Ile Arg Phe Ala Asn His Ser Val Asn Pro Asn Cys Tyr Ala Lys Val
106         690                695                700
107 Met Met Val Asn Gly Asp His Arg Ile Gly Ile Phe Ala Lys Arg Ala
108 705                710                715                720
109 Ile Gln Thr Gly Glu Glu Leu Phe Phe Asp Tyr Arg Tyr Ser Gln Ala
110                725                730                735
111 Asp Ala Leu Lys Tyr Val Gly Ile Glu Arg Glu Met Glu Ile Pro
112                740                745                750
114 <210> SEQ ID NO: 2
115 <211> LENGTH: 2253
116 <212> TYPE: DNA
117 <213> ORGANISM: Human
119 <400> SEQUENCE: 2
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121 tcagagtaca tgcgactgag acagctcaag aggttcagac gagctgatga agtaaagagt    120
122 atgtttagtt ccaatcgtca gaaaattttg gaaagaacgg aaatcttaaa ccaagaatgg    180
123 aaacagcgaa ggatacagcc tgtgcacatc ctgacttctg tgagctcatt gcgcgggact    240
124 agggagtgtt cggtgaccag tgacttggat tttccaacac aagtcatccc attaaagact    300
125 ctgaatgcag ttgcttcagt acccataatg tattcttggt ctcccctaca gcagaatttt    360
126 atggtggaag atgaaactgt tttacataac attccttata tgggagatga agttttagat    420
127 caggatggta ctttcattga agaactaata aaaaattatg atgggaaagt acacggggat    480
128 agagaatgtg ggtttataaa tgatgaaatt tttgtggagt tggtgaatgc ccttggtcaa    540
129 tataatgatg atgacgatga tgatgatgga gacgatcctg aagaaagaga agaaaagcag    600
130 aaagatctgg aggatcaccg agatgataaa gaaagccgcc cacctcggaa atttccttct    660
131 gataaaattt ttgaagccat ttcctcaatg tttccagata agggcacagc agaagaacta    720
132 aaggaaaaat ataaagaact caccgaacag cagctcccag gcgcacttcc tcctgaatgt    780
133 acccccaaca tagatggacc aaatgctaaa tctgttcaga gagagcaaag cttacactcc    840
134 tttcatacgc ttttctgtag gcgatgtttt aaatatgact gcttcctaca tcgtaagtgc    900
135 aattattctt ttcatgcaac acccaacact tataagcgga agaacacaga aacagctcta    960
136 gacaacaaac cttgtggacc acagtgttac cagcatttgg agggagcaaa ggagtttgct   1020
137 gctgctctca ccgctgagcg gataaagacc ccaccaaaac gtccaggagg ccgcagaaga   1080
138 ggacggcttc ccaataacag tagcaggccc agcacccca ccattaatgt gctggaatca   1140
139 aaggatacag acagtgatag ggaagcaggg actgaaacgg ggggagagaa caatgataaa   1200
140 gaagaagaag agaagaaaga tgaaacttcg agctcctctg aagcaaattc tcggtgtcaa   1260
141 acaccaataa agatgaagcc aaatattgaa cctcctgaga atgtggagtg gagtggtgct   1320
142 gaagcctcaa tgtttagagt cctcattggc acttactatg acaatttctg tgccattgct   1380
143 aggttaattg ggaccaaaac atgtagacag gtgtatgagt ttagagtcaa agaatctagc   1440
144 atcatagctc cagctcccgc tgaggatgtg gatactcctc caggaaaaaa gaagaggaaa   1500
145 caccggttgt gggctgcaca ctgcagaaag atacagctga aaaaggacgg ctcctctaac   1560
146 catgtttaca actatcaacc ctgtgatcat ccacggcagc cttgtgacag ttcgtgccct   1620
147 tgtgtgatag cacaaaattt ttgtgaaaag ttttgtcaat gtagttcaga gtgtcaaaac   1680
148 cgctttccgg gatgccgctg caaagcacag tgcaacacca agcagtgccc gtgctacctg   1740
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Input Set : A:\pto.kd.txt
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149 gctgtccgag agtgtgaccc tgacctctgt cttacttgtg gagccgctga ccattgggac   1800
150 agtaaaaatg tgtcctgcaa gaactgcagt attcagcggg gctccaaaaa gcatctattg   1860
151 ctggcaccat ctgacgtggc aggctggggg attttttatca aagatcctgt gcagaaaaat   1920
152 gaattcatct cagaatactg tggagagatt atttctcaag atgaagctga cagaagaggg   1980
153 aaagtgtatg ataaatacat gtgcagcttt ctgttcaact tgaacaatga ttttgtggtg   2040
154 gatgcaaccc gcaagggtaa caaaattcgt tttgcaaatc attcggtaaa tccaaactgc   2100
155 tatgcaaaag ttatgatggt taacggtgat cacaggatag gtattttttgc caagagagcc   2160
156 atccagactg gcgaagagct gttttttgat tacagataca gccaggctga tgccctgaag   2220
157 tatgtcggca tcgaaagaga aatggaaatc cct                                 2253
159 <210> SEQ ID NO: 3
160 <211> LENGTH: 2695
161 <212> TYPE: DNA
162 <213> ORGANISM: Human
164 <400> SEQUENCE: 3
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166 acccggtggg actcagaagg cagtggagcc ccggcggcgg cggcggcggc gcgcggggc     120
167 gacgcgcggg aacaacgcga gtcggcgcgc gggacgaaga ataatcatgg gccagactgg    180
168 gaagaaatct gagaagggac cagtttgttg gcggaagcgt gtaaaatcag agtacatgcg    240
169 actgagacag ctcaagaggt tcagacgagc tgatgaagta aagagtatgt ttagttccaa    300
170 tcgtcagaaa attttggaaa gaacggaaat cttaaaccaa gaatggaaac agcgaaggat    360
171 acagcctgtg cacatcctga cttctgtgag ctcattcgc gggactaggg agtgttcggt     420
172 gaccagtgac ttggattttc caacacaagt catcccatta aagactctga atgcagttgc    480
173 ttcagtaccc ataatgtatt cttggtctcc cctacagcag aattttatgg tggaagatga    540
174 aactgtttta cataacattc cttatatggg agatgaagtt ttagatcagg atggtacttt    600
175 cattgaagaa ctaataaaaa attatgatgg gaaagtacac ggggatagag aatgtgggtt    660
176 tataaatgat gaaattttttg tggagttggt gaatgcccctt ggtcaatata atgatgatga    720
177 cgatgatgat gatggagacg atcctgaaga aagagaagaa aagcagaaag atctggagga    780
178 tcaccgagat gataaagaaa gccgcccacc tcggaaattt ccttctgata aaattttttga    840
179 agccatttcc tcaatgtttc cagataaggg cacagcagaa gaactaaagg aaaaatataa    900
180 agaactcacc gaacagcagc tcccaggcgc acttcctcct gaatgtaccc ccaacataga    960
181 tggaccaaat gctaaatctg ttcagagaga gcaaagctta cactcctttc atacgctttt   1020
182 ctgtaggcga tgttttaaat atgactgctt cctacatcgt aagtgcaatt attcttttca   1080
183 tgcaacaccc aacacttata agcggaagaa cacagaaaca gctctagaca caaaccttg    1140
184 tggaccacag tgttaccagc atttggaggg agcaaaggag tttgctgctg ctctcaccgc   1200
185 tgagcggata aagaccccac caaaacgtcc aggaggccgc agaagaggac ggcttcccaa   1260
186 taacagtagc aggcccagca cccccaccat taatgtgctg gaatcaaagg atacagacag   1320
187 tgatagggaa gcagggactg aaacgggggg agagaacaat gataaagaag aagaagagaa   1380
188 gaaagatgaa acttcgagct cctctgaagc aaattctcgg tgtcaaacac caataaagat   1440
189 gaagccaaat attgaacctc ctgagaatgt ggagtggagt ggtgctgaag cctcaatgtt   1500
190 tagagtcctc attggcactt actatgacaa tttctgtgcc attgctaggt taattgggac   1560
191 caaaacatgt agacaggtgt atgagtttag agtcaaagaa tctagcatca tagctccagc   1620
192 tcccgctgag gatgtggata ctcctccaag gaaaaagaag aggaaacacc ggttgtgggc   1680
193 tgcacactgc agaaagatac agctgaaaaa ggacggctcc tctaaccatg tttacaacta   1740
194 tcaaccctgt gatcatccac ggcagccttg tgacagttcg tgcccttgtg tgatagcaca   1800
195 aaattttgt gaaaagtttt gtcaatgtag ttcagagtgt caaaaccgct ttccgggatg   1860
196 ccgctgcaaa gcacagtgca acaccaagca gtgcccgtgc tacctggctg tccgagagtg   1920
197 tgaccctgac ctctgtctta cttgtggagc cgctgaccat tgggacagta aaaatgtgtc   1980
198 ctgcaagaac tgcagtattc agcggggctc caaaaagcat ctattgctgg caccatctga   2040
199 cgtggcaggc tgggggattt ttatcaaaga tcctgtgcag aaaaatgaat catctcaga   2100
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200 atactgtgga gagattattt ctcaagatga agctgacaga agagggaaag tgtatgataa  2160
201 atacatgtgc agctttctgt tcaacttgaa caatgatttt gtggtggatg caacccgcaa  2220
202 gggtaacaaa attcgttttg caaatcattc ggtaaatcca aactgctatg caaaagttat  2280
203 gatggttaac ggtgatcaca ggataggtat ttttgccaag agagccatcc agactggcga  2340
204 agagctgttt tttgattaca gatacagcca ggctgatgcc ctgaagtatg tcggcatcga  2400
205 aagagaaatg gaaatccctt gacatctgct acctcctccc ccctcctctg aaacagctgc  2460
206 cttagcttca ggaacctcga gtactgtggg caatttagaa aaagaacatg cagtttgaaa  2520
207 ttctgaattt gcaaagtact gtaagaataa tttatagtaa tgagtttaaa aatcaacttt  2580
208 ttattgcctt ctcaccagct gcaaagtgtt ttgtaccagt gaatttttgc aataatgcag  2640
209 tatggtacat ttttcaactt tgaataaaga atacttgaac ttgtcaaaaa aaaaa        2695
211 <210> SEQ ID NO: 4
212 <211> LENGTH: 19
213 <212> TYPE: DNA
214 <213> ORGANISM: Artificial Sequence
216 <220> FEATURE:
217 <223> OTHER INFORMATION: Primer
219 <400> SEQUENCE: 4
220 gcgcgggacg aagaataat                                                   19
222 <210> SEQ ID NO: 5
223 <211> LENGTH: 21
224 <212> TYPE: DNA
225 <213> ORGANISM: Artificial Sequence
227 <220> FEATURE:
228 <223> OTHER INFORMATION: Primer
230 <400> SEQUENCE: 5
231 ggggaggagg tagcagatgt c                                                21
233 <210> SEQ ID NO: 6
234 <211> LENGTH: 18
235 <212> TYPE: DNA
236 <213> ORGANISM: Artificial Sequence
238 <220> FEATURE:
239 <223> OTHER INFORMATION: Primer
241 <400> SEQUENCE: 6
242 caagcagtgc ccgtgcta                                                    18
244 <210> SEQ ID NO: 7
245 <211> LENGTH: 21
246 <212> TYPE: DNA
247 <213> ORGANISM: Artificial Sequence
249 <220> FEATURE:
250 <223> OTHER INFORMATION: Primer
252 <400> SEQUENCE: 7
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255 <210> SEQ ID NO: 8
256 <211> LENGTH: 25
257 <212> TYPE: DNA
258 <213> ORGANISM: Artificial Sequence
260 <220> FEATURE:
261 <223> OTHER INFORMATION: Probe
263 <400> SEQUENCE: 8
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<u>**Invalid <213> Response:**</u>
Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:11,12,13,14

VERIFICATION SUMMARY   DATE: 06/30/2005
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L:8 M:270 C: Current Application Number differs, Replaced Current Application No
L:8 M:271 C: Current Filing Date differs, Replaced Current Filing Date